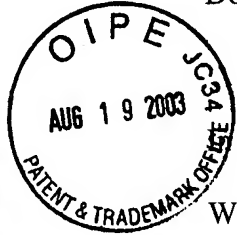


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AF / 1765

Docket No.: 50432-485

PATENT



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

re Application of

Wen-Jie QI, et al.

Serial No.: 10/023,328

Filed: December 20, 2001

: **RESPONSE UNDER 37 CFR 1.116**  
: **EXPEDITED PROCEDURE**

: Customer Number: 20277

: Confirmation Number: 2309

: Group Art Unit: 1765

: Examiner: Lan Vinh

RECEIVED  
AUG 20 2003  
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For: NITRIDE OFFSET SPACER TO MINIMIZE SILICON RECESS BY USING  
POLY REOXIDATION LAYER AS ETCH STOP LAYER

**REQUEST FOR RECONSIDERATION**

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Request for Reconsideration is being filed in response to the final Office Action issued June 19, 2003. For the following reasons, this application should be considered in condition for allowance and the case passed to issue.

Claims 1, 4, 6-10 are rejected under 35 U.S.C. § 102(b) as being anticipated by Ramaswami. Claims 3, 11-12, 14-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ramaswami in view of Hong. These rejections are hereby traversed and reconsideration and withdrawal thereof are respectfully requested.

In the earlier filed Amendment, Applicants amended the claims to include the limitations of forming source/drain extensions in the substrate after the nitride layer has

been etched (claim 1) and forming source/drain extensions and source/drain implants by implantation through the polysilicon reoxidation layer after the nitride layer has been etched (claim 11). This language is simple and clear. However, remarkably, the Examiner maintains that somehow the forming of source/drain regions prior to the depositing of a nitride layer clearly shows that extended source/drain regions are formed after the step of etching a nitride layer. See page 8 of the Office Action. Applicants are at a loss as to how the Examiner can maintain this position.

Firstly, the Examiner has already conceded on page 8 that as depicted in Figures 2-4 of Ramaswami, "Ramaswami only discloses forming source/drain regions 34 and 35 prior to the depositing of the nitride layer 36..." This is completely opposite to the amended claim language of claim 1 and 11, that requires forming the source/drain extensions after the nitride has been etched. Thus, Ramaswami does not disclose forming the source/drain regions after the step of etching the nitride layer. Rather, it discloses the forming of the source/drain regions prior to the depositing of the nitride layer.

The Examiner appears to rely solely on Figure 5 of Ramaswami and states that Ramaswami "clearly shows that extended source/drain regions 34 and 35 are formed after the step of etching the nitride layer 36 as shown in previous Figure 4. Based on this, the Examiner maintains that Ramaswami discloses forming the source/drain extensions after the nitride layer has been etched." This is an untenable position, however.

How can the Examiner reconcile his own statements that Ramaswami only discloses forming source/drain regions 34 and 35 prior to the depositing of the nitride layer 36 with his other statement that Ramaswami discloses forming source/drain extensions after the nitride layer has been etched? Which is it, before or after? The

Examiner has apparently chosen to ignore Figures 2-4 and only sees what allegedly supports his position in Figure 5. This is clearly deficient reasoning, however.

References must be evaluated as a whole, and a portion of a disclosure cannot be taken out of context without consideration of the reference as whole. But this is exactly what the Examiner has done, by ignoring Figures 2-4 and only relying on Figure 5. The Examiner's statement that Figure 5 "clearly shows that extended source/drain regions 34 and 35 are formed after the step of etching the nitride layer 36" is shown by previous Figure 4 to be erroneous on its face. Regions 34 and 35 are present in Figures 2-4 and no amount of wishing can erase this fact. The additional doping to create source/drain regions 43-44 does not create the source/drain extensions 34 and 35 which are already present in the structure, prior to etching of the nitride layer 36.

The above arguments amply demonstrate that Ramaswami fails to disclose each and every step of the claimed invention. In particular, Ramaswami fails to disclose at least the steps of forming source/drain extensions in the substrate after the nitride layer has been etched (claim 1) and forming source/drain extensions and source/drain implants by implantation through the polysilicon reoxidation layer after the nitride layer has been etched (claim 11). To maintain that Ramaswami discloses this feature flies in the face of the unambiguous depiction in Ramaswami of a process in which the lightly doped source/drain regions 34, 35 are provided prior to the deposition of a nitride layer, much less the etching of the nitride layer. Without such an identical disclosure, a rejection based on anticipation under 35 U.S.C. § 102 cannot be maintained. Reconsideration and withdrawal of the rejection of the claims under 35 U.S.C. § 102 are respectfully requested.

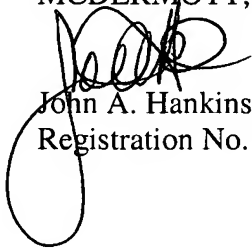
The underpinnings of the rejection of the claims under 35 U.S.C. § 103 based upon a combination of Ramaswami and Hong are fatally flawed for the reasons set forth above. Ramaswami fails to disclose a process in which the source/drain extensions are formed after the etching of the nitride layer. Hong does not overcome these deficiencies, and therefore the combination of the references cannot possibly make obvious the claims of the present invention. Reconsideration and withdrawal of the rejection of claims 3, 11-12 and 14-17 under 35 U.S.C. § 103(a) are therefore respectfully requested.

In light of the remarks above, this application should be considered in condition for allowance and the case passed to issue. If there are any questions regarding this Request for Reconsideration or the application in general, a telephone call to the undersigned would be appreciated to expedite prosecution of the application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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**Date: August 19, 2003**